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(54) **Process for producing cis-3-hydroxy-L-proline**

(57) Provided is a process for industrially producing cis-3-hydroxy-L-proline useful as a raw material for medicines or as an additive to foods. L-proline is converted into cis-3-hydroxy-L-proline in the presence of an enzyme source which is derived from a microorganism belonging to the genus Streptomyces or Bacillus and which catalyzes hydroxylation of L-proline into cis-3-hydroxy-L-proline, a divalent iron ion and 2-ketoglutaric acid, in an aqueous medium, and the produced cis-3-hydroxy-L-proline is recovered from the aqueous medium. Also provided is a novel enzyme L-proline-3-hydroxylase, which is useful for the process.

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## EUROPEAN SEARCH REPORT

Application Number  
EP 94 11 3948

| DOCUMENTS CONSIDERED TO BE RELEVANT  |   |  |   |
|--|---|--|---|
| Category   | Citation of document with indication, where appropriate, of relevant passages   | Relevant to claim                                    | CLASSIFICATION OF THE APPLICATION (Int.Cl.6)                        |
| A  | EP-A-0 190 350 (NAGAI Y.)<br>* the whole document *<br>---  | 1-8  | C12P13/24<br>C12N9/02   |
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| A  | BIOCHEM BIOPHYS RES COMMUN 76 (2). 1977<br>275-281.,<br>TRYGGVASON K ET AL 'SEPARATION OF PROLYL-<br>3 HYDROXYLASE AND PROLYL-4 HYDROXYLASE<br>ACTIVITIES AND THE 4 HYDROXY PROLINE<br>REQUIREMENT FOR SYNTHESIS OF 3 HYDROXY<br>PROLINE.'<br>* the whole document *<br>----- | 1-8  |   |
|  |   |  | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.6)                             |
|  |   |  | C12N<br>C12P  |
| The present search report has been drawn up for all claims   |   |  |   |
| Place of search<br>THE HAGUE   |   | Date of completion of the search<br>12 February 1996 | Examiner<br>Moreau, J   |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>.....<br/>&amp; : member of the same patent family, corresponding document</p> |   |  |   |

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